

**Notice of Allowability**

Application No.

10/789,314

Applicant(s)

MEHLHORN ET AL.

Examiner

Tyrone W. Smith

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed October 14, 2005.
2. ☒ The allowed claim(s) is/are 1-3, 7-9, 12-18 and 20-27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
MARLONT FLETCHER  
PRIMARY EXAMINER

### DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows: The amendment claims consisted of duplicate of claim 15. Therefore, Examiner cancels the second claim 15.

2. Claims 1-3, 7-9, 12-18 and 20-27 in condition for allowance.

3. The following is an examiner's statement of reasons for allowance: The prior art(s) of record does not disclose alone or in combination the following:

Regarding Claim 1, the prior art(s) of record does not disclose alone or in combination of detecting an existence of the operational power comprises detecting at least one of a current associated with the operational power, a voltage associated with the operational power and a frequency associated with the operational power

Regarding Claim 9, the prior art(s) of record does not disclose alone or in combination a current sensor within the control coupled in the first speed circuit to sense a current of the first speed circuit where the controller operation of the switch based in part on whether an operational power is provided to the first speed circuit or the second speed circuit based at least in part on an output of the current sensor

Regarding Claim 12, the prior art(s) of record does not disclose alone or in combination the controller comprises a direct current power supply and a startup lockout circuit, and wherein

the startup lockout circuit is configured to prevent the controller from controlling operation of the switch until the direct current power supply is adequately charged to power components of the controller

Regarding Claim 15, the prior art(s) of record does not disclose alone or in combination the controller, in conjunction with a first and second speed circuit, comprises a voltage sense circuit configured to sense a voltage across the solid state switch and generate an output indicative of when the solid state switch has turned off and the output is utilized to generate the gating pulses

Regarding Claim 17, the prior art(s) of record does not disclose alone or in combination the controller comprises a plurality of logic gates utilized to control operation of the switch based at least in part on detection of a direct current power level, detection of a peak current, generation of a control signal to turn on the switch, and detection of an inception of voltage after a zero-crossing of the voltage across the switch

Regarding Claim 18, the prior art(s) of record does not disclose alone or in combination, in conjunction with limitations of claim 18, the detecting the peak current of the first speed circuit to determine whether the first and second speed circuit is receiving the operational power

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

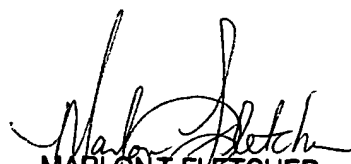
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W. Smith whose telephone number is 571-272-2075. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin, can be reached on 571-272-2800 ext 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tyrone Smith  
Patent Examiner

Art Unit 2837



MARLONT T. FLETCHER  
PRIMARY EXAMINER